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Assignment 1

1. For this sample, the average of monthly earnings is US$ 957.95, with a mean of 13.47 years of education and an average working experience of 11.56 years. Finally, the individuals in this sample have an IQ of 101.28 points, on average
2. Individuals in this sample have an IQ of 101.28 on average with a standard deviation of 15.05 points.
3. There are 393 individuals in the sample with exactly 12 years of education, this is almost 42.03% of the sample.
4. Using the k-12 system in the USA and the maximum years of education that anyone have in the sample, which is 18 years, I conclude that the maximum level of education that anyone reached in the sample is a master degree.
5. $$\widehat{ln(wage)} = 4.858 + \underset{(0.0079)}{0.051}\, educ + \underset{(0.0039)}{0.013}\, exper + \underset{(0.001)}{0.006}\, IQ + \underset{(0.005)}{0.014}\, age$$
6. If we increase education by one year, we expect wages to increase by approximately 5.1 percent, while holding the other factors constant.
7. If education is increased by one year and experience is decreased by one year, wages is expected to change by approximately 3.78 percent, holding the other factors constant.
8. For the given values and sample, I predict the ln(wage) of my friend to be approximately 6.60, on average.
9. Approximately 17% of the variation in Ln(wage) can be explained by the set of the four covariates.
10. When testing the null hypothesis H_0: $educ = exper = 0$ vs. the alternative H_a: $at\ least\ one\ of\ educ, exper \neq 0$ at the 5% level we found an F-statistic (2, 930) equal to 20.76, then I reject the null and conclude that the coefficients $\widehat{educ}$ and $\widehat{exper}$

are significant. Note that these coefficients are significant at even less than the 0.1% level.